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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,133	05/01/2001	Ward Thomas Brown	A01033	7874

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Richard R. Clikeman
Rohm and Haas Company
100 Independence Mall West
Philadelphia, PA 19106

EXAMINER

CHEVALIER, ALICIA ANN

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 08/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/846,133

Applicant(s)

BROWN, WARD THOMAS

Examin r

Alicia Chevalier

Art Unit

1772

-- The MAILING DATE f this c mmunication appears n th cover sheet with the correspondence address --

Peri d for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

RESPONSE TO AMENDMENT

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 24, 2003 has been entered.

WITHDRAWN REJECTIONS

2. The 35 U.S.C. §102 rejection of claims 1 and 6 as anticipated by Bailey (4,950,525) of record in paper #5, pages 6-7, paragraph #6 have been withdrawn due to Applicant's amendment in paper #14.

3. The 35 U.S.C. §102/103 rejection of claims 2-5 as anticipated by or over Bailey (4,950,525) of record in paper #5, page 8, paragraph #9 have been withdrawn due to Applicant's amendment in paper #14.

4. The 35 U.S.C. §103 rejection of claim 1 over Phillips (5,977,263) or Klein et al. (5,882,771) in view of Bailey (4,950,525) of record in paper #5, pages 9-10, paragraph #13 have been withdrawn due to Applicant's amendment in paper #14.

5. The 35 U.S.C. §103 rejection of claims 1-6 over Phillips (5,977,263) in view of Bailey (4,950,525) of record in paper #7, pages 3-4, paragraph #11 have been withdrawn due to Applicant's amendment in paper #14.

Art Unit: 1772

6. The 35 U.S.C. §103 rejection of claims 1-6 over Klein et al. (5,882,771) in view of Bailey (4,950,525) of record in paper #7, pages 4-5, paragraph #12 have been withdrawn due to Applicant's amendment in paper #14.
7. The 35 U.S.C. §103 rejection of claim 7 over Phillips (5,977,263) in view of Bailey (4,950,525) and further in view of Jacobs et al. (5,941,655) of record in paper #7, pages 5-6, paragraph #13 have been withdrawn due to Applicant's amendment in paper #14.
8. The 35 U.S.C. §103 rejection of claim 7 over Klein et al. (5,882,771) in view of Bailey (4,950,525) and further in view of Jacobs et al. (5,941,655) of record in paper #7, page 6, paragraph #14 have been withdrawn due to Applicant's amendment in paper #14.
9. The 35 U.S.C. §103 rejection of claim 7 over Bailey (4,950,525) in view of Jacobs et al. (5,941,655) of record in paper #7, page 6, paragraph #15 have been withdrawn due to Applicant's amendment in paper #14.

NEW REJECTIONS

10. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

Claim Rejections - 35 USC § 102

11. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Bailey (4,950,525).

Bailey discloses a retroreflective sheeting comprising a first coating comprising a pigment and a binder polymer, reflective spherical glass beads, and a clear coating comprising

Art Unit: 1772

binder polymer (col. 2, lines 5-26, col. 3, line 68 and col. 10, lines 20-23). The retroreflective sheeting is used as a traffic (pavement) marker on the surface of the road (substrate) (col. 9, lines 30-33). The materials of the top and spacing films or layers should be compatible with one another and adapted to form a good bond together and may further comprise ultraviolet light absorbers (col. 7, lines 47-65).

With regard to the transitional phrase “consisting essentially of”, the examiner reminds applicants that “[t]he transitional phrase “consisting essentially of” limits the scope of a claim to the specified materials or steps “and those that do not materially affect the basic and novel characteristic(s)” of the claimed invention. *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976) (emphasis in original)” (MPEP § 2111.03). The MPEP explicitly states “[f]or search and examination purposes, absent a clear indication in the specification of what the basic and novel characteristics actually are, “consisting essentially of” will be construed as equivalent to “comprising.”

The MPEP further states “[w]hen an applicant contends that additional steps or materials in the prior art are excluded by the recitation of “consisting essentially of,” applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention”. In the court case cited in the MPEP, it should be noted the court’s finding that “the court noted that appellants’ specification indicated the claimed composition can contain any well-known additive such as a dispersant, and there was no evidence that the presence of a dispersant would materially affect the basic and novel characteristic of the claimed invention. *The prior art composition had the same basic and novel*

characteristic (increased oxidation resistance) as well as additional enhanced detergent and dispersant characteristics” [emphasis added] MPEP § 2111.03.

In the instant case, the transitional phrase “consisting essentially of” will be construed as equivalent to “comprising,” because the additional layers in Bailey do not materially affect the basic and novel characteristic(s)” of the claimed invention. The specification in the summary of the invention on pages 2-3, the basic and novel characteristics of the invention is a composite on a surface of a substrate, wherein the composite includes a first coating including pigment and binder polymer, reflective beads, and a clear coating including binder polymer. The additional layers between the road surface (applicants claimed substrate) and the composite do not materially affect or alter the function of the composite on the substrate.

Claim Rejections - 35 USC § 103

12. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey (4,950,525) in view of Ochi et al. (5,821,316).

Bailey discloses all the limitations of the instant claimed invention except for the binder polymer has a glass transition temperature of -10°C to 70°C.

Ochi discloses a retroreflective sheeting comprising a first coating comprising a binder polymer, reflective spherical glass beads, and a clear coating comprising binder polymer (col. 2, line 59 to col. 3, line 34). The binder polymer has a glass transition temperature not higher than 35°C and provides a high bonding strength between the clear coating and the first coating (col. 2, line 59 to col. 3, line 34).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use a binder polymer with a glass transition temperature not higher than 35°C as the binder polymer in Bailey as taught by Ochi because it would provide high bonding strength between the clear coating and the first coating. Which is a desired feature in Bailey, the materials of the top and spacing films or layers should be compatible with one another and adapted to form a good bond together (col. 7, lines 47-65).

13. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey (4,950,525) in view of Araki et al. (5,714,223) or Abe et al. (5,988,822).

Bailey discloses all the limitations of the instant claimed invention except for the clear coating has a percent visible light transmission of 80-100%, 85-100% or 90-100% when measured at a coating thickness of 500 microns.

Araki discloses a retroreflective sheet comprising a cover layer with a transmission to all light of at least 90% for the purpose of increasing a reflection luminance and stability of the reflection luminance with time (retention of reflection luminance) (col. 4, lines 7-10).

Abe discloses a retroreflective sheeting comprising a transparent protective film having light transmission of preferably at least 90%. The light transmission of the film is preferably relatively high, so that light retroreflected from a distant source and light generated from the light generating beads is minimally degraded (col. 3, lines 13-46).

In view of the teachings in Araki and Abe, it would have been obvious to one having ordinary skill in the art at the time of the invention to use a clear coating with visible light transmission of 90-100% when measured at a coating thickness 500 microns in Bailey because

Art Unit: 1772

higher visible light percentage transmission of the film the higher the reflection luminance (brighter) and it will have minimal degradation (the light reflected will be brighter).

14. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey (4,950,525) in view of Jacobs et al. (5,941,655).

Bailey discloses all the limitations of the invention except for the composite comprising an absorber such as talc.

Jacobs discloses a glass bead retroreflective article comprising a base sheet constructed of a polymer and a particulate inorganic filler such as talc (col. 8, lines 34-64). Fillers are dispersed in the resin to reduce cost, improve durability and provide conformability (col. 1, lines 33-36)

It would have been obvious to one of ordinary skill to add talc as an inorganic filler to binder layer of Bailey as taught by Jacobs when used as a pavement marker because the filler would improve the durability, provide conformability and decrease the cost of the polymer.

ANSWERS TO APPLICANT'S ARGUMENTS

15. Applicant's arguments filed in paper #14 regarding the 35 U.S.C. 102, 102/103 and 103 rejections of record have been considered but are moot due to the new grounds of rejections.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (703) 305-1139. The Examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:00 p.m. The Examiner can also be reached on alternate Fridays

Art Unit: 1772

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Harold Pyon can be reached by dialing (703) 308-4251. The fax phone number for the organization official non-final papers is (703) 872-9310. The fax number for after final papers is (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose phone number is (703) 308-0661.

ac

8/8/03

*Alicia
Chavaler*